

# THE HARD FACTS

**One important aspect  
of sexual health and what  
you need to know about it.**



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# Erectile Dysfunction (ED) – An Overview

## ED is common and treatable

A Canadian study has shown that approximately half (49.4%) of men age 40 and over were affected by erectile dysfunction (ED) to some degree.<sup>1,2,\*</sup> ED is a medical condition and can be treated.<sup>3</sup>

Many men do not see their doctors about treatment because they believe ED is a normal part of aging or they are just too embarrassed to talk about it.<sup>4</sup>

## About this brochure

This brochure will provide you with valuable information about ED and its treatments. It will aid you in making the decision to talk to your doctor and provide tools to help make that first visit easier.

# STEP 1: Getting the facts

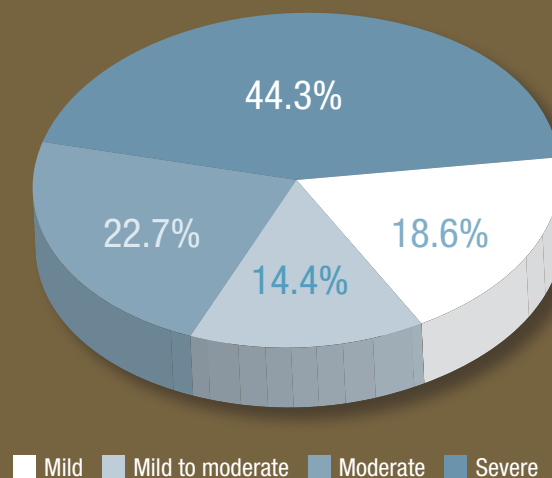
## About ED

Erectile Dysfunction (ED) is the preferred clinical term describing the inability to achieve and maintain a penile erection of sufficient rigidity to permit satisfactory sexual activity.<sup>3</sup> It does not necessarily mean a complete inability to achieve an erection.<sup>5</sup>

ED can be classified as mild, moderate or severe based on factors such as erection hardness and frequency of the problem.<sup>6</sup>

**Close to half (44.3%) of men with ED age 40 and over had a severe condition.<sup>1</sup>**

## Severity of ED<sup>1</sup>



Adapted from Grover *et al.*<sup>1</sup>

\*A questionnaire-based survey of 3,921 Canadian men aged 40 to 88 years visiting one of 75 primary care physician offices.

# How erections occur

## The soft (flaccid) penis

Without arousal, the amount of blood going into your penis equals the amount flowing out and the penis remains soft.<sup>5,7</sup>

## Aroused penis

With arousal, the nerves cause the smooth muscle of the corpora cavernosa in the penis to relax.<sup>5,7,8</sup>

## The erect penis

As arousal continues, blood keeps moving into your penis and is prevented from flowing back out. When filled with blood, the penis becomes rigid and intercourse is possible.<sup>5,7,8</sup>

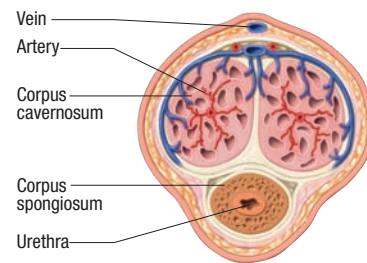
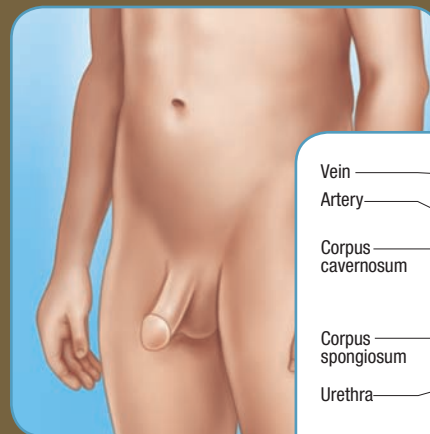
## How does ED change things?

An erection requires a precise sequence of events including **nerve impulses** in the brain, spinal column and area around the penis, as well as response in **muscles, fibrous tissues, veins and arteries** in and near the corpora cavernosa.<sup>5,8</sup>

**ED can occur when any of these events is disrupted.**<sup>5</sup>

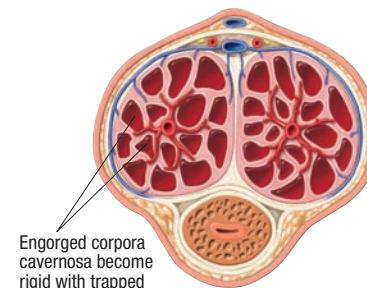
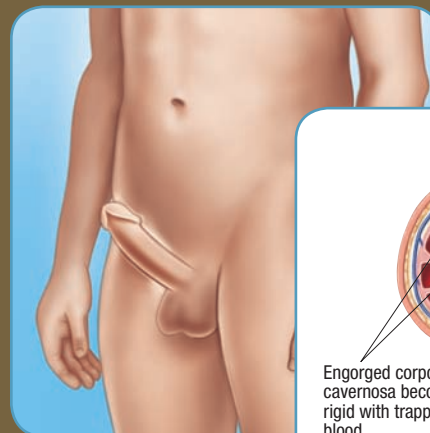
# Anatomy of the penis

## The soft (flaccid) penis



Flaccid penis cross-section

## The erect (rigid) penis



Erect penis cross-section

# Possible causes of ED

Changes in the flow of blood to and from the penis are considered to be an important cause of ED. Nerve or hormone problems, medication, and psychological issues may also lead to ED.<sup>7,8</sup>

## What could be happening in your body...<sup>7</sup>

- **Blood flow disturbances** at the penis level
- **Nerve function problems** relating to communication between the nerves and penis
- **Hormone (testosterone) deficiency**

## Drugs could play a role...<sup>7</sup>

*Some examples:*

- Certain blood pressure lowering medications
- Antidepressants
- Recreational substances such as alcohol, cocaine and marijuana have also been associated with ED

**Never stop taking your prescribed medications without consulting your doctor.**

## Psychological problems

*Some examples:*

- Depression, anger and stress<sup>7</sup>

**Many cases of ED end up having a psychological component even if the main cause is related to body function.<sup>7</sup>**

## Lifestyle choices are also possible causes of ED<sup>5</sup>

*Some examples include:*

- Smoking
- Being overweight
- Lack of physical activity (or exercise)

# ED and disease

**Diseases account for about 70% of ED cases.<sup>5</sup>**

## Possible causes of ED

- Diabetes<sup>7</sup>
- Heart disease<sup>8</sup>
- High blood pressure<sup>8</sup>
- Cholesterol problems<sup>7</sup>
- Hardening of the arteries<sup>7</sup>

**Diabetes is one of the most common causes of ED...<sup>9</sup>**

## Diabetes

**35 to 75% percent of men with diabetes experience ED.<sup>5,7</sup>**

Diabetes can lead to unhealthy blood vessels and nerve damage – both of which may cause ED.<sup>7</sup>

Normally, erection messages are sent by the brain or spinal cord to the penis through the nerves. These messages tell the blood vessels in the penis to trap enough blood for an erection. Since diabetes has a negative effect on both nerves and blood vessels, this sequence of events may be interrupted at one or more points.<sup>5,7</sup>

## Cardiovascular disease

ED is more common in men with cardiovascular disease.<sup>7,10</sup>

Circulation problems or hardening of the arteries may cause damage to the blood vessels in the penis so that they will not open or relax enough for an erection to occur normally.<sup>5</sup>

**Risk factors for cardiovascular disease are similar to risk factors for ED.** These include obesity, smoking, high blood pressure and cholesterol problems.<sup>11</sup>

# ED and aging

ED should not be considered a normal part of the aging process.<sup>7</sup>

However, occurrence of **ED tends to increase with age due to biological and psychological changes** related to the aging process.<sup>7</sup>

## Other conditions or treatments can also lead to ED

*These include:*

- Multiple sclerosis
- Kidney disease
- Chronic alcoholism
- Spinal injury
- Depression
- Some treatments for prostate cancer (surgery and radiation therapies) or psychological problems such as anger and stress<sup>5,7</sup>

## STEP 2:

# Recognizing the problem

### When should I suspect ED?

By definition, ED is the preferred clinical term describing the inability to achieve and maintain a penile erection of sufficient rigidity to permit satisfactory sexual activity.<sup>3</sup>

ED may appear as:

- Inability to get an erection
- Inability to penetrate your partner
- Inability to keep an erection after penetration
- Inability to keep an erection long enough to complete intercourse
- Erections that are not hard enough for penetration<sup>6</sup>

**ED symptoms can vary within one patient (over the course of different attempts at erection) and between patients.<sup>5</sup>**

- Not all symptoms of ED are present all the time and not necessarily for all attempts at obtaining an erection.
- Make sure to tell your doctor about how often you experience one or more of these symptoms.
- Mild ED is generally “a few times”, mild-to-moderate “sometimes”, moderate “most times” and severe “almost always/always”.<sup>6</sup>

### The Erection Hardness Score

Evaluation of ED takes into consideration the hardness of an erection and how it may affect your sex life. You can evaluate your Erection Hardness Score using the tool at the back of this brochure.<sup>12</sup>

**TIP:**  
**Diagnosis and treatment of ED is generally done by a general practitioner (family doctor) although in some cases patients may be referred to a specialist.<sup>3</sup>**

**If you think you may have ED, bring it up with your doctor. Experiencing ED may also be a sign of other health problems.**

## You, ED and your partner

**“...there is no such thing as an uninvolved partner”**

Masters and Johnson, 1970 – The Textbook of ED.<sup>13</sup>

“ED is a prevalent and distressing condition experienced by millions of men and their partners worldwide.”

The Textbook of ED.<sup>13</sup>

**ED can have an emotional impact on BOTH partners when there is *no communication*.**<sup>13,14,†</sup>

A study showed that men and their partner reported the following emotions due to a *lack of communication*:

- Frustration
- Apprehension
- Shame
- Depression
- Helplessness
- Isolation
- Guilt
- Anxiety

### Knowledge can make communication easier

A study showed that *knowing about effective treatments* was a factor that could pave the way to a first conversation about ED.<sup>13,14,†</sup>

### Talking about it **CAN** help

In a study, initial conversations between partners about ED led to feelings of support, understanding, relief and hope.<sup>13,14,†</sup>

**Almost half of men, and over 40% of their partners felt SUPPORTED after an initial conversation.<sup>13</sup>**

†Based on 30 minute, face-to-face individual interviews with small samples of men with ED, partners of men with ED and physicians who treat ED, recruited in Germany, the UK and Spain. The study participants included 10 men with ED, 10 female partners of men with ED and 15 physicians.

## STEP 3:

# Diagnosing and treating ED

### What to expect from treatment

When you tell your doctor you think you may have ED, he/she is likely to do the following:<sup>3</sup>

- Ask you about your medical history
- Conduct a physical exam
- Ask you to fill out a questionnaire about ED

Your doctor may also request some lab work and/or refer you to a specialist.

### Treatment options

#### Sexual counselling

- This could range from a simple discussion with your doctor to speaking with sex therapists or psychology experts in intimacy-building.<sup>3,7</sup>

#### Medical therapies

- **Oral Agents:** drugs that can be taken by mouth. These drugs include phosphodiesterase type 5 inhibitors.
- **Vacuum Therapy:** a vacuum constriction device or a constriction ring alone. Both pull blood into the penis and keep it there to maintain an erection.
- **Local Therapy:** includes 2 types of injection, one into the urethra and the other into the corpus cavernosa.
- **Surgery:** the most common approach involves implanting a semi rigid or inflatable penile prosthesis.<sup>3,7</sup>

All medical therapies may be associated with side effects.

## Can I decrease my risk of experiencing ED?

Although many men experience ED from time to time, you can take these steps to decrease the possibility of ED happening:

- Work with your doctor to manage conditions that can lead to ED such as diabetes and heart disease
- Limit or avoid drinking alcohol
- Avoid illegal drugs
- Don't smoke
- Exercise regularly
- Reduce your stress levels
- Get enough sleep
- If you need it, get help for anxiety or depression
- Have regular checkups and medical screening tests<sup>15</sup>

**Doctors generally aim to start with the least invasive treatment that also satisfies patient and partner goals of treatment.<sup>3</sup>**

# STEP 4: Moving forward

## Consider erectile QUALITY

Learn as much as you can about ED and make sure to keep the lines of communication open with your partner and your doctor.

**TIP:**  
If you think it will make the conversation easier, you may want to include your partner when you visit the doctor to talk about ED.

## To learn more about ED

Visit [www.edhelp.ca](http://www.edhelp.ca)

EDhelp, the Canadian Erectile Difficulties Resource Centre

For MEN For WOMEN Ask the Doctor, Sexual Health Expert

You're not alone

So how do I know if I have erectile difficulties (ED)?

Take a guess!  
On average, how often do Canadian men and women have sex every month?

Is my guy having erectile difficulties?

Reality check: If you or your partner is having trouble with erection, to keep an erection, there's absolutely nothing you can do.

ED? Go ahead and ask.

ED is an issue of great concern to many couples. If you or your partner has questions about ED, your family physician is the best place to start.

Need Questions?

# If you think you are experiencing ED...

Use the Erection Hardness Score to evaluate your erections and discuss with your doctor.

**Make an appointment with your doctor.**

**Visit [www.edhelp.ca](http://www.edhelp.ca)**

**References:** 1. Grover SA *et al.* The prevalence of erectile dysfunction in the primary care setting: importance of risk factors for diabetes and vascular disease. *Arch Intern Med* 2006;166:213-9. 2. Statistics Canada. Population by sex and age group. 2009. <http://www40.statcan.gc.ca/I01/cst01/demo10a-eng.htm> (accessed March 27, 2009). 3. Canadian Urological Association. Erectile dysfunction practice guidelines. *Can J Urol* 2002;9:1583-7. 4. Sadovsky R *et al.* Primary care evaluation and treatment of erectile dysfunction: American perspective. In: Carson III CC, Kirby RS, Goldstein I, Wyllie MG. (ed.). *Textbook of Erectile Dysfunction*. 2<sup>nd</sup> ed. New York: Informa Healthcare USA, Inc.; 2009;201-12. 5. National Kidney and Urologic Diseases Information Clearinghouse and National Institutes of Health. Erectile dysfunction. 2008. <http://kidney.niddk.nih.gov/kudiseases/pubs/impotence> (accessed March 27, 2009). 6. Rosen RC *et al.* Development and evaluation of an abridged, 5-item version of the International Index of Erectile Function (IIEF-5) as a diagnostic tool for erectile dysfunction. *Int J Impot Res* 1999;11:319-26. 7. McVary KT. Sexual Dysfunction. In: Kasper DL *et al.* (ed.). *Harrison's Principles of Internal Medicine*. 17<sup>th</sup> ed. USA: The McGraw-Hill Companies, Inc.; 2008;1-11. 8. Lue TF. Physiology of Penile Erection and Pathophysiology of Erectile Dysfunction and Priapism. In: Walsh PC, (ed.). *Campbell's Urology*. 8<sup>th</sup> ed. Philadelphia: Saunders; 2002;1591-618. 9. Minhas S *et al.* Erectile dysfunction and diabetes. In: Carson III CC, Kirby RS, Goldstein I, Wyllie MG. (ed.). *Textbook of Erectile Dysfunction*. 2<sup>nd</sup> ed. New York: Informa Healthcare USA, Inc.; 2009;449-56. 10. Saenz de Tejada I *et al.* Physiology of erectile function and pathophysiology of erectile dysfunction. In: Lue TF, *et al.* (ed.). *SEXUAL MEDICINE Sexual Dysfunctions in Men and Women*. 2<sup>nd</sup> ed. Paris: Editions 2004;21:289-343. 11. Jackson G *et al.* Vascular risk factors and erectile dysfunction. In: Carson III CC, Kirby RS, Goldstein I, Wyllie MG. (ed.). *Textbook of Erectile Dysfunction*. 2<sup>nd</sup> ed. New York: Informa Healthcare USA, Inc.; 2009;120-5. 12. Mulhall JP *et al.* Validation of the erection hardness score. *J Sex Med* 2007;4:1626-34. 13. Fisher WA *et al.* McIntyre-Erectile dysfunction: the couple context. In: Carson III CC, Kirby RS, Goldstein I, Wyllie MG. (ed.). *Textbook of Erectile Dysfunction*. 2<sup>nd</sup> ed. New York: Informa Healthcare USA, Inc.; 2009;190-200. 14. Fisher WA *et al.* Communication about erectile dysfunction among men with ED and physicians: the Strike Up a Conversation Study (Part I). *Men's Health GenD* 2005;2:64-78. 15. Mayo Clinic. Erectile Dysfunction - Prevention. 2009. <http://www.mayoclinic.com/health/erectile-dysfunction/DS00162/DSECTION=prevention> (accessed April 2, 2009).

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## Erection Hardness Score (EHS)<sup>10</sup>

